

MURS360B(LS)

SURFACE MOUNT SUPER FAST RECTIFIERS

REVERSE VOLTAGE – 600 Volts
FORWARD CURRENT – 3.0 Amperes

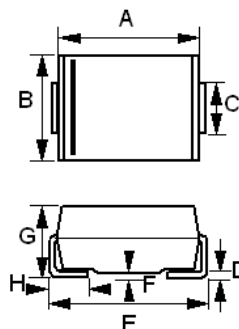
FEATURES

- Glass passivated chip
- Super fast switching for high efficiency
- For surface mounted applications
- Low forward voltage drop and high current capability
- Low reverse leakage current
- Qualified according to AEC-Q101 Rev_D
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. "Green" Device (Note 3)**

MECHANICAL DATA

- Package: Molded plastic
- Package Material: Molding compound, UL Flammability classification 94V-0, "Halogen-free".
- Polarity: Color band denotes cathode
- Weight: 0.003 ounces, 0.093 grams
- Marking: U3JB

SMB



SMB		
DIM.	MIN.	MAX.
A	4.06	4.57
B	3.30	3.94
C	1.96	2.21
D	0.15	0.31
E	5.21	5.59
F	0.05	0.20
G	2.01	2.50
H	0.76	1.52

All Dimensions in millimeter

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	MURS360B	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	600	V
Maximum DC Blocking Voltage	V _{DC}	600	V
Maximum Average Forward Rectified Current @T _c =130°C	I _{AV}	3.0	A
Peak Forward Surge 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	100	A
Maximum Forward Voltage at 3.0A DC	V _F	1.25	V
Maximum DC Reverse Current @T _j =25°C at Rated DC Blocking Voltage @T _j =150°C	I _R	3.0 150	µA
Maximum Reverse Recovery time (I _F =0.5A, I _R =1.0A, I _R =0.25 A)	t _{rr}	50	ns
Single pulse avalanche energy @15mH	E _{AS}	10.8	mJ
Typical Junction Capacitance (Note 4)	C _j	45	pF
Typical Thermal Resistance (Note 5, 6)	R _{θJC} R _{θJL} R _{θJA}	12 26 47	°C/W
Operating Junction Temperature Range	T _j	-55 to +175	°C
Storage Temperature Range	T _{STG}	-55 to +175	°C

Note:

1. EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
2. See <https://www.diodes.com/quality/lead-free/> for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
4. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
5. Thermal Resistance Junction to Case, Lead and Ambient.
6. Unit mounted on glass epoxy substrate 1oz/ft 12 mm x 12 mm copper pad.

REV.-4, Oct-2021, KSGB10

RATING AND CHARACTERISTIC CURVES
MURS360B

FIG.1- FORWARD CURRENT DERATING CURVE

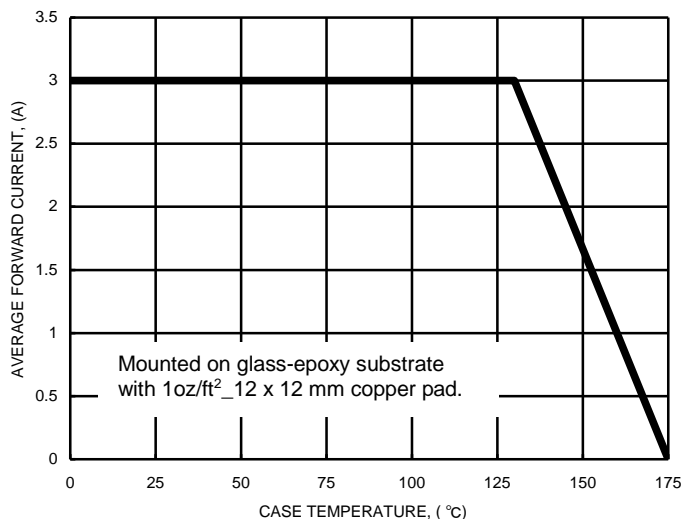


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

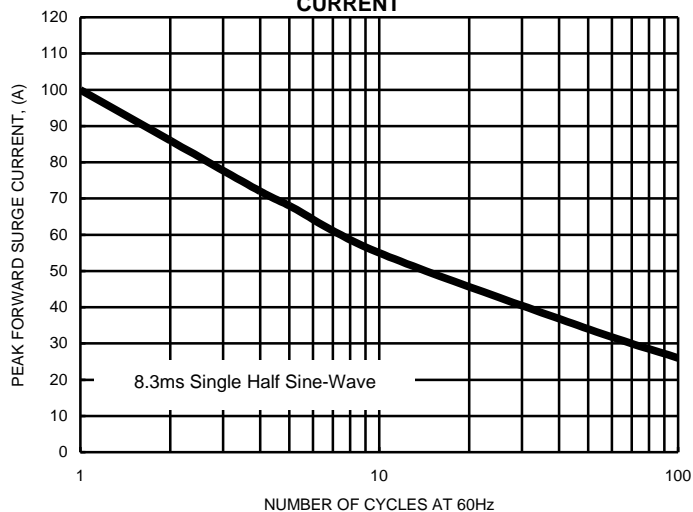


FIG.3- TYPICAL JUNCTION CAPACITANCE

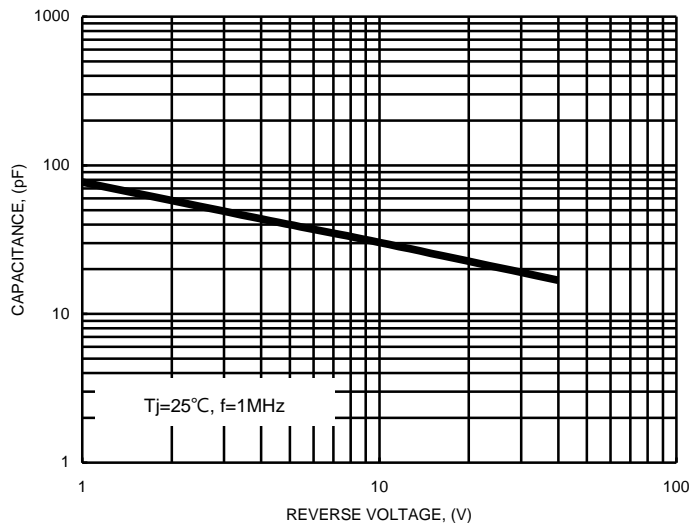


FIG.4- TYPICAL FORWARD CHARACTERISTICS

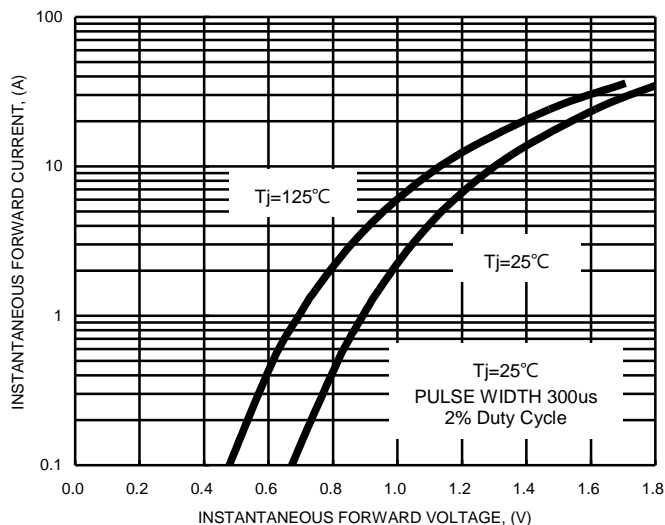
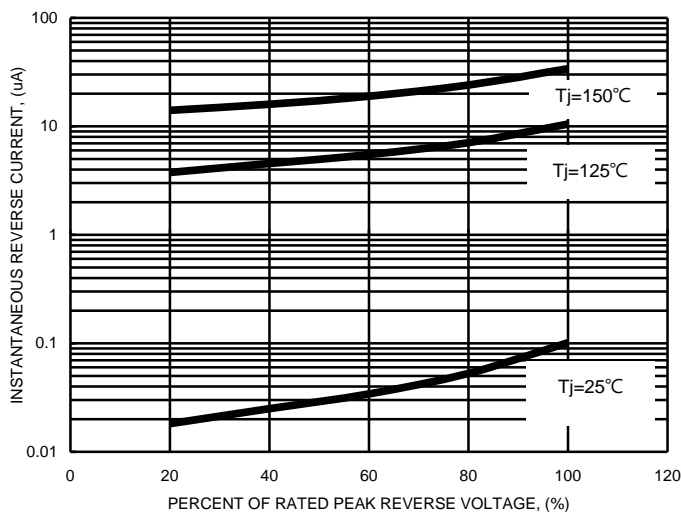


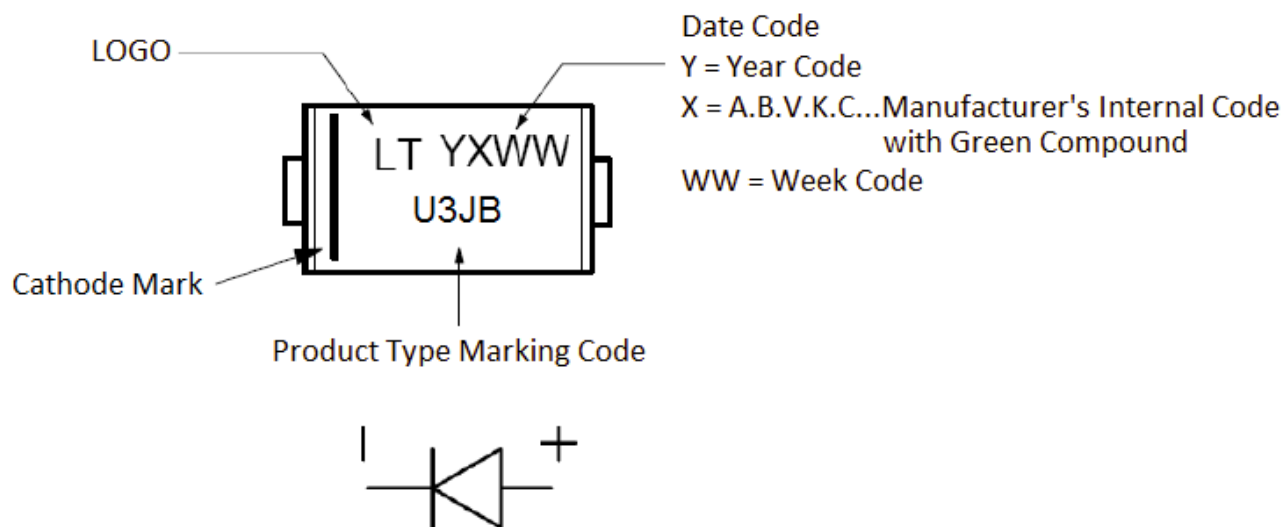
FIG.5- TYPICAL REVERSE CHARACTERISTICS



Ordering Information :

Part Number	Package	Packing	
		Qty.	Carrier
MURS360B	SMB	3000	Tape & Reel

Marking Information :



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